



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,628	01/27/2004	Timothy D. Strecker	200312175-1	2262

22879 7590 02/23/2007
HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

CARTAGENA, MELVIN A

ART UNIT PAPER NUMBER

3754

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/765,628

Applicant(s)

STRECKER ET AL.

Examiner

Melvin A. Cartagena

Art Unit

3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) 2-11, 14, 24, 36, 39, 40 and 43-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 12, 13, 15-23, 25-35, 37, 38, 41, 42, 48-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1272004.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of species 7 in the reply filed on November 09, 2006 is acknowledged. The traversal is on the ground(s) that the various embodiments read on limitations that are not mutually exclusive. This is not found persuasive because an apparatus moving a single product from a single inlet port towards an outlet port by a rotatory vane is different than an apparatus moving and mixing multiple products from multiple inlet ports towards a single outlet by a single or multiple rotatory vanes. Heated dispensers are very specific and only required with to dispense specialized products. The species are mutually exclusive.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 2-11, 14, 24, 26-34, 36, 39, 40 and 43-47 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on November 09, 2006. Regarding claims 2-4, 14, 39, 40, 43 and 44, the claims do not read on the elected species because those claims are directed to embodiments with multiple inlets into the dispensing apparatus.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3754

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 12, 13, 15-17, 22, 23, 34, 35, 37, 38 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,082,289 to Caballero.

Caballero shows a dispensing device as seen in Figs. 2 and 3, having an ceramic cylindrical body 24, see column 3, lines 49-53, removable disposed inside a housing 100, a ceramic feed screw 23 of lines pitch urging a viscoelastic material to an outlet 28b and a second portion 30. The screw is in sliding contact with the interior wall of the cylindrical body.

In reference to method claim 42, the device of Caballero discloses an apparatus that performs the steps of introducing a viscoelastic material into a ceramic body, rotating a feed screw disposed in the chamber to urge and dispense the material from apparatus.

5. Claims 1, 12, 13, 15-17, 22 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,983,867 to Fugere.

Fugere shows a dispensing apparatus as seen in Figs. 1A-2B and 17, having a ceramic body 70 forming a chamber, the body is disposed within a housing 60, an inlet 100 in fluid communication with the chamber, a feed screw 74 having an helical thread with linear pitch that urges a viscoelastic fluid toward the outlet 68 and a second portion 82.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3754

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 18, 19, 20, 21, 25-32, 41, 48, 49 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,082,289 to Caballero in view of US 4,090,640 to Smith et al.

Caballero shows all claimed features as discussed above except for the use of heater elements to increase the temperature of the housing. Smith shows a hot melt adhesive having controllable heater elements 80 in thermal contact with the screw housing 66, as seen in Fig. 2. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the device of Caballero to include heater elements to reduce the viscosity of the product in contact with the dispenser and facilitate the product flow through the dispenser as taught by Smith.

With respect to the working temperature range for the electric heaters and the type of heat source, the claimed temperature working range and heat source type presents no novel or unexpected result over the temperature ranges used in the references. Use of such a temperature ranges in lieu of those used in the references solves no stated problem and would be an obvious matter of design choice within the skill of the art. In re Launder, 42 CCPA 886, 222 F.2d 371, 105 USPQ 446 (1955); Flour City Architectural Metals v. Alpena Aluminum Products, Inc., 454 F. 2d 98, 172 USPQ 341 (8th Cir. 1972); National Connector Corp. v. Mapco Manufacturing Co., 392 F.2d 766. 157 USPQ 401 (8th Cir.) cert. denied, 393 U.S. 923, 159 USPQ 799 (1968).

8. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,082,289 to Caballero in view of US 5,890,033 to Parker.

Caballero shows all claimed features as discussed above except for the use of heater elements to increase the temperature of the feed screw. Parker shows a feed screw 94 with internal heating elements 120. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the device of Caballero to include a heater element in the feed screw to further reduce the viscosity of the product in contact with the dispenser and facilitate the product flow through the dispenser as taught by Parker.

9. Claims 51, 52, 54, 55, 58 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,082,289 to Caballero in view of US 3,869, 525 to Miller.

Caballero shows all claimed features as discussed above except for a process of cleaning the feed screw and the housing. Miller shows a mixture and process of cleaning extruder housing and screw using a composite mixture and heat. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to clean the housing and screw of the device of Caballero using a cleaning composition at a predetermine temperature to reduce the dispenser downtime and increase the time between maintenance intervals as taught by Miller.

10. Claims 53, 56 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,082,289 to Caballero as modify by US 3,869, 525 to Miller as applied to claims 51 and 52 above, and further in view of US 6,165,312 to Ward.

The Caballero-Miller combination shows all claimed features as discussed above except for the use of reactive plasma treatment to clean components of the dispensing device. Ward shows a plasma cleaning operation used to clean industrial components. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to use a reactive plasma treatment to clean the elements of the dispenser of the Caballero-Miller

Art Unit: 3754

combination to reduce the large volume of industrial cleaning solvent currently use by solvent cleaning processes as taught by Ward.

Conclusion

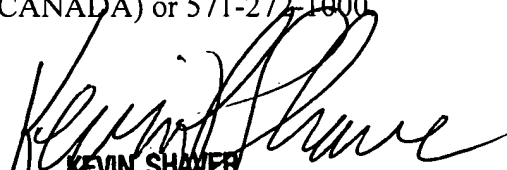
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Buquet shows a powder coating product sprayer. Nakayama shows an indirect heating furnace. Ngo shows a rotary dispensing pump.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin A. Cartagena whose telephone number is (571) 272-4924. The examiner can normally be reached on T-F (7:30AM to 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MAC 1/8/07
MAC


KEVIN SHAVER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700